

United States Patent and Trademark Office

JS.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/001,267	10/31/2001	Lakshmi Rambhatla	093/004P	1874	
22869 . 7	590 04/18/2005		• EXAMINER		
GERON CORPORATION 230 CONSTITUTION DRIVE			TON, THAIAN N		
MENLO PARI			ART UNIT PAPER NUMBER		
			1632		
			DATE MAILED: 04/18/2005	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/001,267	RAMBHATLA ET AL.	
Examiner	Art Unit	
Thaian N. Ton	1632	

	Thaian N. Ton	1632				
The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence add	ress			
THE REPLY FILED 15 March 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.						
1. The reply was filed after a final rejection, but prior to filing applicant must timely file one of the following replies: (1) application in condition for allowance; (2) a Notice of Application (RCE) in compliance time periods:	an amendment, affidavit, or other peal (with appeal fee) in compliance with 37 CFR 1.114. The reply mu	evidence, which plac e with 37 CFR 41.31;	es the or (3) a			
a) The period for reply expires <u>3</u> months from the mailing date of						
b) The period for reply expires on: (1) the mailing date of this Adv event, however, will the statutory period for reply expire later the	an SIX MONTHS from the mailing date o	of the final rejection.				
Examiner Note: If box 1 is checked, check either box (a) or (b). MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f) Fidencians of time may be obtained under 27 CFR 1.135(c). The data are) .					
Extensions of time may be obtained under 37 CFR 1.136(a). The date on been filed is the date for purposes of determining the period of extension a CFR 1.17(a) is calculated from: (1) the expiration date of the shortened sta above, if checked. Any reply received by the Office later than three month earned patent term adjustment. See 37 CFR 1.704(b).	nd the corresponding amount of the fee. atutory period for reply originally set in the	The appropriate extension final Office action; or (2)	on fee under 37 as set forth in (b)			
NOTICE OF APPEAL						
 The reply was filed after the date of filing a Notice of App was filed on A brief in compliance with 37 CFR 4 Appeal (37 CFR 41.37(a)), or any extension thereof (37 CAPP APPEAL A	1.37 must be filed within two mon CFR 41.37(e)), to avoid dismissal of	ths of the date of filing of the appeal. Since a	the Notice of			
3. The proposed amendment(s) filed after a final rejection, (a) They raise new issues that would require further co	nsideration and/or search (see NC	ef, will <u>not</u> be entered DTE below);	because			
(b) They raise the issue of new matter (see NOTE belo						
(c) ☐ They are not deemed to place the application in being appeal; and/or			the issues for			
(d) They present additional claims without canceling a NOTE: <u>See Continuation Sheet</u> . (See 37 CFR 1.1		ejected claims.				
4. The amendments are not in compliance with 37 CFR 1.1	21. See attached Notice of Non-C	ompliant Amendmen	t (PTOL-324).			
5. Applicant's reply has overcome the following rejection(s):						
6. Newly proposed or amended claim(s) would be a the non-allowable claim(s).						
7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro	oxtimes will not be entered, or b) $oxtimes$ wided below or appended.	vill be entered and an	explanation of			
The status of the claim(s) is (or will be) as follows: Claim(s) allowed:						
Claim(s) objected to:						
Claim(s) rejected: <u>13-40</u> . Claim(s) withdrawn from consideration:						
AFFIDAVIT OR OTHER EVIDENCE						
8. The affidavit or other evidence filed after a final action, be because applicant failed to provide a showing of good an and was not earlier presented. See 37 CFR 1.116(e).	ut before or on the date of filing a I d sufficient reasons why the affida	Notice of Appeal will <u>rands</u> Notice of Appeal will <u>rands</u>	not be entered is necessary			
9. The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to other evidence failed to other evidence failed to other evidence.	vercome all rejections under appe	al and/or appellant fa	ils to provide a			
showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.						
REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but	t does NOT place the application i	in condition for allowa	ance because:			
See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s).	(PTO/SB/08 or PTO-1449) Paper	No(s)				
13. Other:						
		7.17	4			

U.S. Patent and Trademark Office PTOL-303 (Rev. 9-04) Continuation of 3. NOTE: The amendments to the claims raise new issues of search and/or consideration because the recitation of "an effective concentration" of a histone deacetylase inhibitor, and the production of at least about 40% of specific differentiated cells would require new considerations under 112, 1st and 102/103.

Continuation of 11. does NOT place the application in condition for allowance because: The amendments to the claims are not entered. The prior rejections of record are maintained. The obviousness-type double patenting rejection is maintained. Applicants argue that the claims in the '589 patent cover a product, namely a set of cell populations, that the Office has applied a 2-way test of obviousness, where only a one-way test is permitted, and that the claims of the '589 patent do not suggest generating hepatocyte lineage cells using a histone deacetylase inhibitor. See p. 8 of the Response. This is not persuasive. As a one-way test, the instant claims are directed to methods that result in the cell populations of the '589 patent. Thus, given the claims of the instant application, the claims of the '589 patent are obvious, because the methods taught by the instant specification would only result in the cells claimed in the '589 patent.

Applicants further argue, that with regard to the enablement requirement in the prior Office action, that it is unnecessary for the claims to indicate the concentration of buytrate needed to effect differentiation into hepatocyte lineage cells. The specification exemplifies butryate concentrations that are effective, and should the reader deviate from the exemplified concentration, this can be done with undue experimentation. Furthermore, Applicants argue that the amendment reciting, "an effective concentration" of a histone deacetylase inhibitor overcomes the prior rejection. Finally, Applicants point to the specification to show that the working exmaples show that the process can be done using a number of histone deacetylase inhibitors. See pp. 8-9. This is not persuasive. Firstly, the amendments to the claims have not been entered, thus, the rejections of record are maintained. Secondly, it is noted that the claims require a certain percentage of cells to result in hepatocyte lineage cells (60%). The working examples in the specification provide specific examples using butyrate to produce these percentages. Table 3 provides the induction of hepatocyte phenotypes using the histone deacetylase inhibitors recited in Applicants' Response, but nowhere does this table provide sufficient guidance as to the molar amount of these inhibitors, or the percentage of cells produced. The mere recitation of a phenotype fails to enable the claims. Finally, it is maintained that the art recognizes that specific guidance must be provided to enable the claimed invention, because the concentration of a particular histone deactylase inhibitor is crucial in order to produce hepatocyte lineage cells, and thus, critical to practice the claimed invention. See also, pp. 5-6 of the Final Office action.